Dealing with Construction and Demolition Debris in Rural Alaska

ADEC Solid Waste Program

What is Construction and Demolition Debris?

Commonly known as “C&D” – It is waste material generated by anything from a home remodel to a full demolition of a building. In rural communities, the source is often construction, demolition, or renovation of community or commercial facilities and water/sewer systems.

C&D Debris

ISSUES with C&D

- It requires proper planning ahead of projects
- It takes up valuable space in the landfill
- It's bulky and hard to compact
- It's expensive to ship out
- It causes issues without community ordinances or clear acceptance criteria

You can help resolve these!

Who is responsible?

The Waste Generator* is responsible for legal disposal.

Examples of Waste Generators:

- Homeowners
- Schools
- Contractors

* Waste Generator = whoever is creating the waste.

How to protect the landfill from improper disposal

Ordinances

Prior to accepting landfill staff should evaluate:

- Ordinances and/or procedures for acceptance
- Costs incurred for handling
- Landfill space requirements

Ordinance Template available on Solid Waste Program website.

Ordinances

Clear ordinances benefit everyone

- No Surprises
- Protective of human health and the environment
- Know what has been agreed upon
- Compensated appropriately for accepting the waste
- Ability for proper management of the landfill

Preliminary Planning is Important

Planning Considerations for C&D Debris:

Handling Costs or In-Kind Services

Cover Material Availability

Personnel Needed

Landfill Space Required

Lack of planning results in a big mess at the landfill.

What are some of the costs to consider?

Equipment- fuel, operator, wear and tear

Landfill Operator- may require additional billable hours

Landfill Space- it can cost millions of dollars to build a new landfill

In-Kind

If charging for In-Kind Services make sure it is a fair trade.

Calculating Landfill Space

If this landfill was 500ft by 500ft with 10 ft high berms, it would have:

500ft X 500ft X 10ft = 2,500,000 cubic feet of airspace. 1 cubic foot equals .037 cubic yards, or 92, 592 cubic yards.

If the landfill cost 8 million dollars to build, the airspace costs $8,000,000 divided by 92,592 cubic yards = $86.40 per cubic yard.

So for just the airspace, if a project wanted to bring you 1 dump truck of C&D it would cost $860.40. Most dump trucks in rural Alaska are a 10 cubic yard box.

Most rural projects bring 10+ dump truck loads of C&D debris to the landfill.

C&D Disposal Cost Examples

To dispose of a 10 yards or one dump truck full of C&D debris at these landfills it will cost:

Fairbanks North Star Borough Landfill- $690

Anchorage Regional Landfill- $197.25

Juneau Capitol Landfill - $388

Nome Inert Waste Monofill- $155

Central Peninsula Landfill in Soldotna- $135

How much does disposal cost at your landfill?

Pre-demolition Waste Screening

A Building Survey should be conducted before demolition by the waste generator to identify and remove:

- Lead Based Paint
- Asbestos
- Items that contain Mercury
- Hazardous Wastes

***Ask for a copy of the Building Survey prior to accepting C&D debris at the landfill.**

Post-demolition Screening

The landfill operator should look at each load delivered to the landfill.

- Look for bags of asbestos
- Waste that is too hard to compact
- Wiring or cables that can damage heavy equipment
- Electronics
- Hazardous waste

Other Disposal Options are Available

- One-Time Authorization for C&D Monofill
- Backhaul to Permitted Disposal Site

One-Time C&D Monofill

Requirements:

Landowner Consent

Consists solely of inert and non-RACM waste

Waste generated locally

From a single project

Less than 1000 cubic yard disposal

Must be open, filled, and closed in a single year

Closure plan and report required

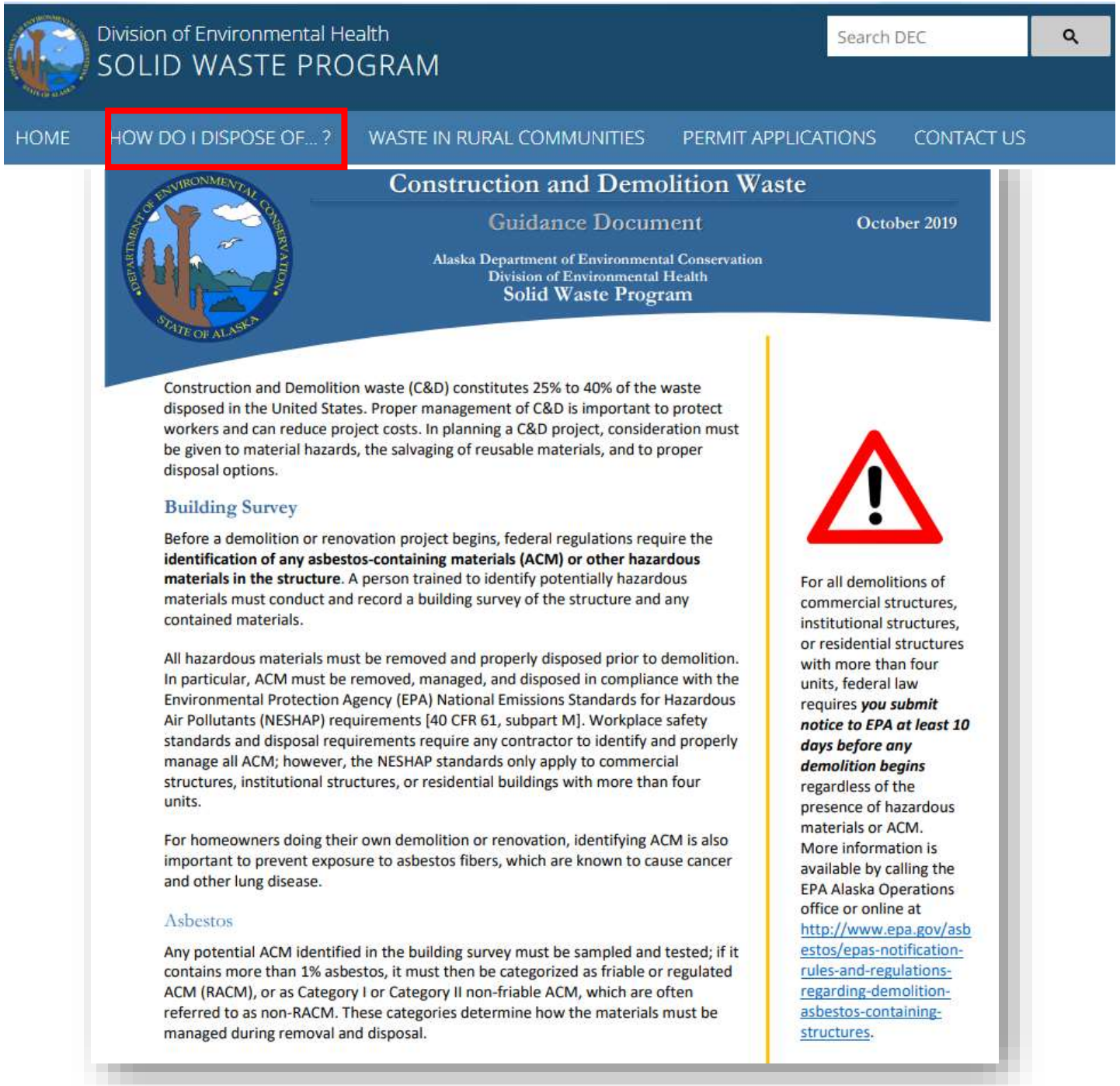
Backhaul

Waste can be backhauled to a larger permitted facility for disposal

Waste Generator should be made aware that disposal is not available locally before project starts.

Options for backhaul:

- Inert Waste Monofill
- Class I Landfill



Links to Applications and more Information

DEC Solid Waste Program Website

Guidance Documents

Ordinance Template

Letters to Contractors

Applications

Contacts for questions

Link to our website:

https://dec.alaska.gov/eh/solid-waste/

Questions